

shows an electronic tensiometer for direct measurement of tension in the wire or cable. The Grade '639 reference also describes a tensiometer.

The present invention eliminates the need for a tensiometer because the present invention applies a known pressure load to a wire and directly measures the deflection of the wire under load. Of interest is that the pressure gauge in the present invention measures applied pressure, not the to be measured tension. The amount of pressure applied is preselected. The tension in the wire is then calculated from the measured deflection. The present invention does not utilize a tensiometer as shown and described in the Proceq reference and the Grade '639 reference.

The Examiner states that it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the wire tension meter of the Proceq reference by using the teachings the Grade '639 reference providing the wire tension meter with a hydraulic supporting structure and a pressure gauge for the purpose of furnishing means for controlling the force to be applied to the wire which tension is going to be measured and means for measuring the force applied to the wire in order to determine its tension. Applicant respectfully disagrees with the Examiner's statement and submits that the references could not be combined as suggested by the Examiner. The "Hydraulic Support Structure" of the Grade '639

reference is a hydraulic compression load cell, not a jack designed to apply a pulling force as in the present invention. As is described in column 4, lines 20-30 of the Grade '639 reference, the hydraulic load cell clearly reads the pressure applied to it; the load cell does not apply pressure like the 5 jack does in the present invention.

Due to the fact that the Proceq reference and the Grade '639 reference both describe and/or show a tensiometer and the present invention does not utilize a tensiometer. Applicant submits the 10 claims are not obvious over the references. Further, the Grade '639 reference teaching the use of a hydraulic compression load cell which reads pressure that is applied to the load cell does not teach the present invention that utilizes a hydraulic jack to supply a preset pressure. Applicant submits the present 15 invention is not obvious over the combination of references as described by the Examiner. Claims 1, 8 and 10 are allowable independent claims and claims 2-3, 5-7, 9, 12-14 and 16-18 are either directly or indirectly dependent on independent claims 1, 8 and 10, therefore the dependent claims are patentably 20 distinguishable over the combination of references for at least the same reasons. Therefore, Applicant respectfully requests the Examiner to withdraw the 103 rejection to claims 1-3, 5-10, 12-14 and 16-18.

Enclosed with this response is a Supplemental Information Disclosure Statement that includes the King (USPN 3,653,258) and the McKernan (USPN 3,174,334) references. The McKernan '334 reference is a mechanical tensiometer and does not supply a known force to the cable. The present invention applies a known load to a wire and measures the deflection of the wire. The tension is then calculated. The present invention does not utilize a tensiometer as utilized in the McKernan '334 reference.

Furthermore, the McKernan '334 reference loading pattern works in a reversed manner from the manner utilized in the present invention. The McKernan '334 reference has outer feet hooked around a cable and an inner pressure rod presses on the cable to push the cable away from the outer feet. Springs are designed to compress and exert force on the cable via the pushing rod. The pushing rod would not be utilized by the present invention as the present invention does not push the wire but pulls the wire. The McKernan '334 reference would not be utilized for measuring the tension of a cable or wire in concrete because additional concrete would need to be removed to allow the wire to be pushed outward rather than pulled inward as in the present invention. Due to the fact that the McKernan '334 reference is a mechanical tensiometer and the present invention does not utilize a tensiometer, as well as, the McKernan '334 reference working in a reverse manner than the present invention and therefore not useful to measure a cable in concrete, the

McKernan '334 reference does not make the present invention obvious.

The King '258 reference is a tensiometer that measures the tension in a rope by applying a pressure against the rope and measuring the counter pressure applied by the rope. Also, a flexible beam is utilized in the King '258 reference and as the pressure is applied against the rope, the gauge measures the deflection of the beam. Furthermore, the King '258 reference utilizes electrical resistance string gauges to measure the load on the rope. The present invention does not utilize a tensiometer and there is no gauge to measure the deflection of a flexible beam in the present invention. Since the King '258 reference is a tensiometer that utilizes a gauge to measure the deflection of a beam and string gauges to measure the load on the rope and the present invention does not utilize a tensiometer, as well as, not utilizing a gauge for the deflection of a beam, therefore the King '258 reference does not make the present invention obvious.

Applicant respectfully requests the Examiner to withdraw the 20 103 rejection and forward a Notice of Allowability to the undersigned.

If the Examiner has any questions or comments that would speed prosecution of this case, the Examiner is invited to call the undersigned at 260/485-6001.

Respectfully submitted,



Randall J. Knuth  
Registration No. 34,644

RJK/td8

CERTIFICATE OF MAILING

Encs:  
Supplemental IDS  
Petition for Extension of  
Time  
Cited References  
Check No. 6008 (\$235)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Hon. Commissioner of Patents and Trademarks, Washington, D.C. 20231, on: April 3, 2002.

Randall J. Knuth, Regis. No. 34,644  
Name of Registered Representative



Signature  
April 3, 2002  
Date

RANDALL J. KNUTH, P.C.  
3510-A Stellhorn Road  
Fort Wayne, IN 46815-4631  
Telephone: 260/485-6001  
Facsimile: 260/486-2794